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IS 1660-1 (1982): Wrought Aluminium Utensils, Part 1: Cooking table, serving storing and baking utensils [MED 33: Utensils, Cutlery and Domestic Hardware]

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IS : 1660 (Part 1) - 1982
(Reaffirmed 2004)

Indian Standard
SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS
(Second Revision)

Third Reprint SEPTEMBER 2007
(Including Amendment Nos 1,2,3,4,5 & 6)

UDC 643 35.669.71-131

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Gr 6 *June* 1982

AMENDMENT NO. 6 SEPTEMBER 2003
TO
IS 1660 (PART 1) : 1982 SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

PART 1 COOKING, TABLE, SERVING, STORING AND BAKING UTENSILS

(Second Revision)

(*Page* 5, *clause* **2.1.2**) — Substitute '*Inner Diameter of Utensil*' *for* '*Overall Diameter of Blank*' and '*Minimum Nominal Sheet Thickness*' *for* '*Nominal Thickness*'.

[*Page* 5, *clause* **3.1** (*see also Amendments No.* 4 *and* 5)] — Substitute the following for the existing clause:

'**3.1** The main body and handle shall be fabricated from material comlying with the requirements of IS 21 : 1992*, other aluminium parts of utensils shall be manufactured from the material complying with IS 21 : 1992* or IS 617 : 1994†, accordingly as they are wrought or cast. The lids, if provided shall be of aluminium or stainless steel or toughened glass and complying to IS 21 : 1992* or IS 5522 : 1992‡ as applicable.

---

*Wrought aluminium and aluminium alloys for manufacture of utensils — Specification (*fourth revision*)

†Aluminium and aluminium alloy ingots and castings for general engineering purposes (*third revision*).

‡ Stainless steel sheets and strips for utensils (*second revision*).'

(*Page* 18, *Table* 1, *col* 4) — Substitute the following for the existing:

Sl No	Dia D (Inside)
(1)	(4)
	mm
1	75 to 150
2	150 to 250 Above 250 to 325

Sl No	Dia D (Inside)
(1)	(4)
	mm
3	150 to 250 Above 250 to 350 Above 350 to 625 Above 625 to 875 Above 875 to 1 250
4	75 to 250 Above 250 to 325 above 325 to 550 Above 550 to 750 Above 750 to 825
5	150 to 225 Above 225 to 300
6	—
7	100 to 180
8	—
9	150 to 255
10	125 to 255
11	200 to 320 Above 320 to 560
12	—
13	—
14	85 to 310 Above 310 to 510
15	150 to 250 Above 250 to 360
16	—

Sl No	Dia D (Inside)
(1)	(4) mm
17.	—
18	75 to 155
19.	230 255 Above 255
20	115 to 225 Above 225 to 450
21	125 to 150
22	125 to 450 Above 450 to 610
23.	65 to 150

(*Page* 19, *note under Table* 1) -- Substitute the following for the existing note:

'NOTE — For checking the reduction in thickness, measurements for thickness shall be made at the thinnest place, but excluding the flanges or sharp edges The lid of the same thickness may be supplied, if required by the purchaser '

(*Page* 20, *clause* **4.2**) — Substitute the following for the existing:

'**4.2** Taking into account the drawing or spinning process and also the negative tolerance on the sheet, the thinnest section of the utensil shall not be more than 15 percent less than the minimum nominal sheet thickness specified in Table 1 or in **2.1.2**.'

(ME 33)

Reprography Unit, BIS, New Delhi, India

AMENDMENT NO. 6 SEPTEMBER 2003
TO
IS 1660 (PART 1) : 1982 SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

PART 1 COOKING, TABLE, SERVING, STORING AND BAKING UTENSILS

(Second Revision)

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*Wrought aluminium and aluminium alloys for manufacture of utensils — Specification (*fourth revision*)

†Aluminium and aluminium alloy ingots and castings for general engineering purposes (*third revision*)

‡ Stainless steel sheets and strips for utensils (*second revision*) '

(*Page* 18, *Table* 1, *col* 4) — Substitute the following for the existing:

Sl No (1)	Dia D (Inside) (4) mm
1	75 to 150
2	150 to 250
	Above 250 to 325

Sl No	Dia D (Inside)
(1)	(4) mm
3	150 to 250 Above 250 to 350 Above 350 to 625 Above 625 to 875 Above 875 to 1 250
4	75 to 250 Above 250 to 325 above 325 to 550 Above 550 to 750 Above 750 to 825
5	150 to 225 Above 225 to 300
6	—
7	100 to 180
8	—
9	150 to 255
10	125 to 255
11	200 to 320 Above 320 to 560
12	—
13	—
14	85 to 310 Above 310 to 510
15	150 to 250 Above 250 to 360
16	—

Sl No (1)	Dia D (Inside) (4) mm
17	—
18	75 to 155
19	230 255 Above 255
20.	115 to 225 Above 225 to 450
21	125 to 150
22	125 to 450 Above 450 to 610
23	65 to 150

(*Page* 19, *note under Table* 1) — Substitute the following for the existing note:

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(*Page* 20, *clause* **4.2**) — Substitute the following for the existing:

'**4.2** Taking into account the drawing or spinning process and also the negative tolerance on the sheet, the thinnest section of the utensil shall not be more than 15 percent less than the minimum nominal sheet thickness specified in Table 1 or in **2.1.2**.'

(ME 33)

Printed at Simco Printing Press, Delhi

AMENDMENT NO. 5 APRIL 2002
TO
IS 1660 (PART 1) : 1982 SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

PART 1 COOKING, TABLE, SERVING, STORING AND BAKING UTENSILS

(Second Revision)

[*Page* 5, *clause* 3 (*see also Amendment No.* 4)] — Substitute the following for the existing matter:

3 MATERIAL

3.1 The utensil shall be supplied with or without lid. The main body shall be fabricated from aluminium complying with the requirements of IS 21 : 1992*. The lid, if provided, shall be manufactured either from aluminium complying with the requirements of IS 21 : 1992* or stainless steel conforming to designation X04Cr19Ni9 or X07Cr18Ni9 of IS 5522 : 1992‡ respectively. Other components of the utensils shall be manufactured from material complying with IS 617:1994 'Aluminium and aluminium alloy ingots and castings for general engineering purposes (*third revision*)' or IS 21 : 1992* according to whether they are cast or wrought.

---

*Specification for wrought aluminium and aluminium alloys for manufacture of utensils (*fourth revision*).

‡Specification for stainless steel sheets and strips for utensils (*second revision*)

(ME 33)

Printed at Simco Printing Press, Delhi

AMENDMENT NO. 4 MAY 1998
TO
IS 1660 (PART 1) : 1982 SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

PART 1 COOKING, TABLE, SERVING, STORING AND BAKING UTENSILS

(Second Revision)

(*Page* 5, *clause* 3.1) — Substitute the following for the existing clause:

3 MATERIAL

3.1 The main body of the utensil shall be provided with or without lid. The main body shall be fabricated from aluminium complying with the requirements of IS 21 : 1992*. The lid, if provided, shall be manufactured either from aluminium complying with the requirement of IS 21 : 1992* or stainless steel conforming to designation $\mathrm{XO_4Cr_{19}Ni_9}$ or $\mathrm{XO_7Cr_{18}Ni_9}$ of IS 5522 : 1992‡ respectively. Other component parts of utensils shall be manufactured from material complying with IS 20 : 1977 'Specification for cast aluminium and aluminium alloys for utensils (*third revision*)' or IS 21 : 1992* accordingly as they are cast or wrought.

---

*Specification for wrought aluminium and aluminium alloys for manufacture of utensils (*third revision*) .

‡Specification for stainless steel sheets and strips for utensils (*second revision*).

(LM 27)

Printed at Simco Printing Press, Delhi

AMENDMENT NO. 3 JULY 1992
TO
IS 1660 (Part 1) : 1982 SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

PART 1 COOKING, TABLE, SERVING, STORING AND BAKING UTENSILS

(Second Revision)

(*Page* 4, *clause* 1.1) — Insert the following new clause after 1.1:

'1.2 Aluminium utensils shall mean any aluminium ware manufactured from aluminium or its alloy which can be used for eating, drinking, cooking, baking, serving or storing of food or drinking including water and other household provisions.'

(*Page* 21, *clause* 7.3) — Insert the following at the end:

"If required by the purchaser, the anodized utensils may be supplied according to the requirements of anodic coating covered in IS 6057 : 1970 'Specification for hard anodic coatings on aluminium'."

(MTD 31)

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AMENDMENT NO. 2 NOVEMBER 1984
TO
IS:1660(Part 1)-1982 SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

PART 1 COOKING, TABLE, SERVING, STORING AND BAKING UTENSILS

(Second Revision)

Alteration

(*Page 21, clause 9.1*) - Substitute the following for the existing clause:

'9.1 Each utensil shall be legibly and indelibly stamped on the outside surface or handle with the manufacturer's name or registered trade-mark and the nominal thickness specified in Table 1.'

(CPDC 5)

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AMENDMENT NO. 1 DECEMBER 1983

TO

IS : 1660 (Part I)-1982 SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

(Second Revision)

Corrigendum

(*First Cover, pages* 1 *and* 3, *title*) — Substitute the following for the existing title:

' Indian Standard

SPECIFICATION FOR
WROUGHT ALUMINIUM UTENSILS

PART I COOKING, TABLE, SERVING, STORING AND BAKING UTENSILS

(Second Revision)'

(CPDC 5)

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Indian Standard

SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

(Second Revision)

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(*Continued on page* 2)

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(*Continued from page* 1)

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(*Continued on page* 22)

Indian Standard

SPECIFICATION FOR WROUGHT ALUMINIUM UTENSILS

(Second Revision)

0. FOREWORD

0.1 This Indian Standard (Part I) (Second Revision) was adopted by the Indian Standards Institution on 11 February 1982, after the draft finalized by the Utensils Sectional Committee had been approved by the Consumer Products and Medical Instruments Division Council.

0.2 This standard was first published in 1960 and revised in 1967. The standard was widely used both by the manufacturers and the users/purchasers, as a result of which certain changes became necessary and Amendment No. 1 and Amendment No. 2 were issued. Through Amendment No. 1 issued in 1973, this standard was made as Part I of a series of standards on Wrought Aluminium Utensils. Since, this standard covered only a limited varieties of commonly used utensils, subsequently Part II and Part III of IS : 1660 as well as certain other Indian Standards were published separately to cover a few other varieties of utensils. However, these standards were still not able to cover all the varieties of Wrought Aluminium Utensils which were being exported and while implementing the scheme of ISI Certification Marking under the provision of Indian Customs Act 1962 (52 of 1962) for Wrought Aluminium Utensils, a need was felt to evolve a general standard for Wrought Aluminium Utensils which should be able to cover all such types of utensils not covered under separate standards. As a result of this, IS : 1660 (Part IV)-1977 Wrought aluminium utensils: Part IV General requirements, was published.

0.3 Now, after gaining experience about the implementation of these standards, it has been felt expedient to unify some of the standards on commonly used Wrought Aluminium Utensils into one standard, which will result in simplyfying and rationalizing the manufacturing and quality control of such utensils. This second revision, therefore, merges the following parts of IS : 1660 into one standard on Wrought Aluminium Utensils:

IS : 1660 (Part I)-1967 Cooking table, serving and storing utensils (*first revision*)

IS : 1660 (Part II)-1972 Cookery colanders
IS : 1660 (Part III)-1972 Pans patty (jelly mould) for baking
IS : 1660 (Part IV)-1977 General requirements

0.4 Aluminium utensils are being used in this country in a very large quantity. They are also being exported to countries in the Middle East, Africa and South-East Asia In the interest of export trade, the Government of India have, since the middle of 1956, made it mandatory under the Indian Customs Act 1962 (52 of 1962) for wrought aluminium utensils to bear the ISI Certification Mark before these are exported. This step has helped the industry to a considerable extent in controlling an important aspect of quality. By an amendment to the Prevention of Food Adulteration Rules, 1955, the Government of India have recently made it obligatory on the part of establishments coming within the purview of the Prevention of Food Adulteration Act, 1954 (37 of 1954) to use utensils made of aluminium conforming to IS : 20-1977* or IS : 21-1975†.

0.5 The useful life of a utensil, its robustness and its satisfactory use depends not only on the quality of the metal from which it is fabricated, but also on the thickness of the finished utensil. Therefore, it was felt necessary to lay down the minimum thickness for various types and sizes of the most commonly used wrought aluminium utensils. However, for other varieties which are not so commonly identified, minimum nominal sheet thickness, based on the overall diameter of the blank to be used, has been specified.

0.6 Some of the utensils specified in this standard have been classified into three grades, namely (a) Heavy; (b) Medium; and (c) Light. This has been arrived at, after due consideration of cost and general pattern of demand existing at present. Whereas medium and light classes correspond to the two grades in the earlier version of the standard, heavy class represents such utensils as are suitable for big establishments and are used on open coal gas and firewood fires.

1. SCOPE

1.1 This standard (Part I) prescribes general requirements, quality of material and thicknesses for some of the more commonly used wrought aluminium utensils (*see* Fig. 1 to 23) of three classes (*see* **2.1**).

NOTE — Fig. 1 to 23 are intended to illustrate only the general shapes and the manner of designating the sizes of utensils, therefore, these should not be considered as indicative of definite designs Where necessary, constructional details and other requirements may be agreed upon between the purchaser and the supplier.

---

*Specification for cast aluminium and aluminium alloy for utensils (*third revision*).

†Specification for wrought aluminium and aluminium alloy for manufacture of utensils (*third revision*).

2. CLASSIFICATION

2.1 Where specified, the utensils shall be classified as follows:

a) Heavy,
b) Medium, and
c) Light.

2.1.1 Thickness of the sheets used in the manufacture of utensils of these classes shall be as given in Table 1.

2.1.2 The nominal thickness of the sheet for those utensils which are not covered under Table 1 shall be as as given below:

Overall Diameter of Blank	*Nominal Thickness*
Up to 125 mm	0·71 mm
From 126 mm up to 225 mm	0·90 mm
Above 226 mm	1·20 mm

3. MATERIAL

3.1 The main body and the lid, if provided, shall be fabricated from material complying with the requirements of IS : 21-1975*. Other aluminium component parts of utensils shall be manufactured from material complying with IS : 20-1977† or IS : 21-1975*, accordingly as they are cast or wrought.

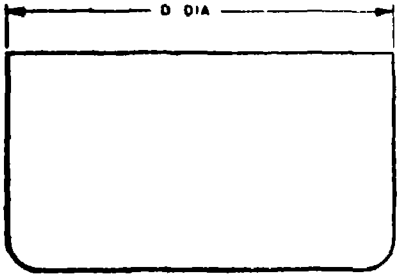

Fig. 1 *KATORI*

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*Specification for wrought aluminium and aluminium alloys for manufacture of utensils (*third revision*).

†Specification for cast aluminium and aluminium alloy for utensils (*third revision*).

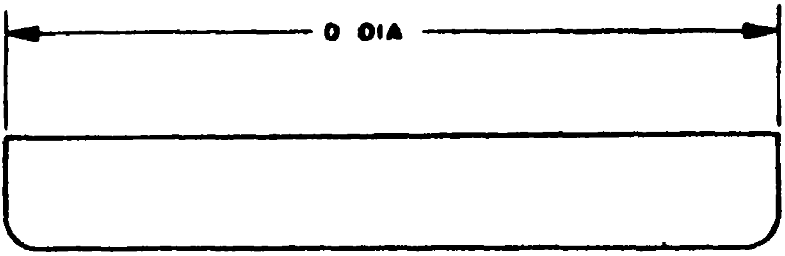


Fig. 2 *THALI*

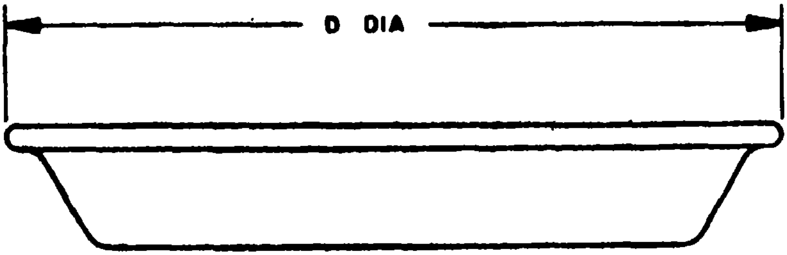


Fig. 3 *PARAT*

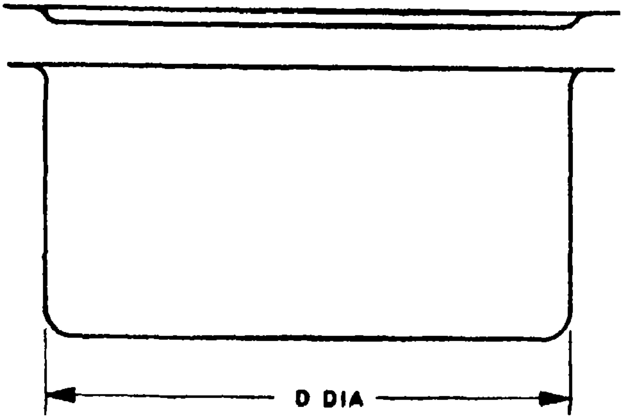


Fig. 4 *DEGCHI*

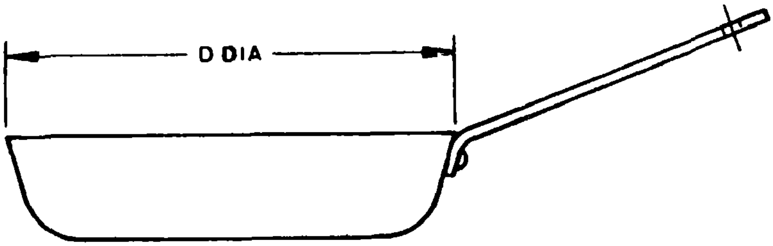


Fig. 5 Frying-Pan

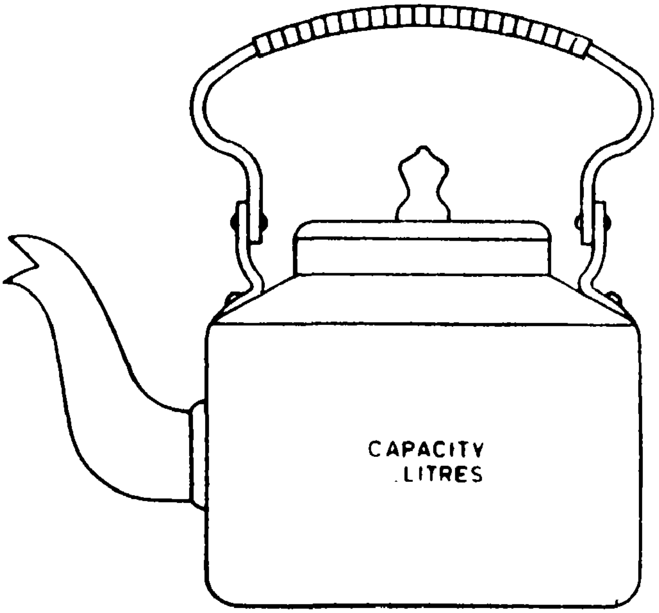


Fig. 6 Kettle

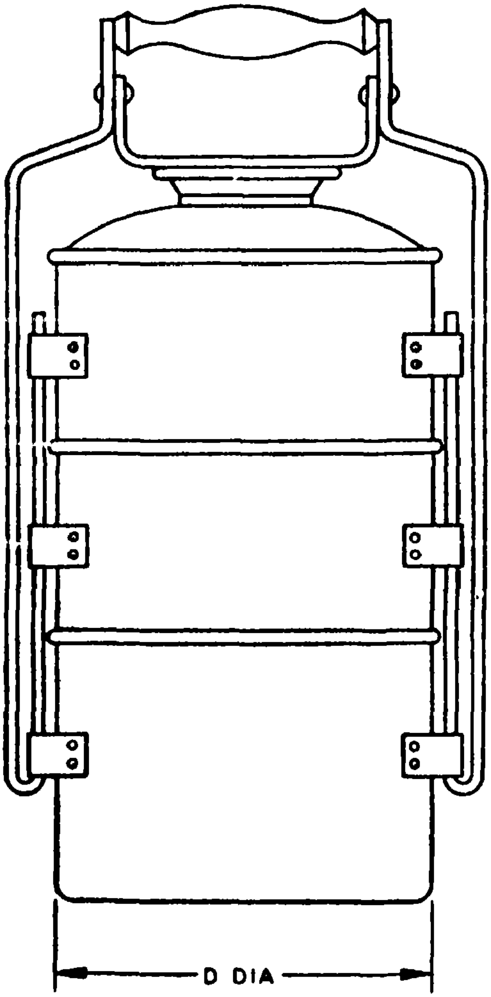


FIG. 7 TIFFIN-CARRIER

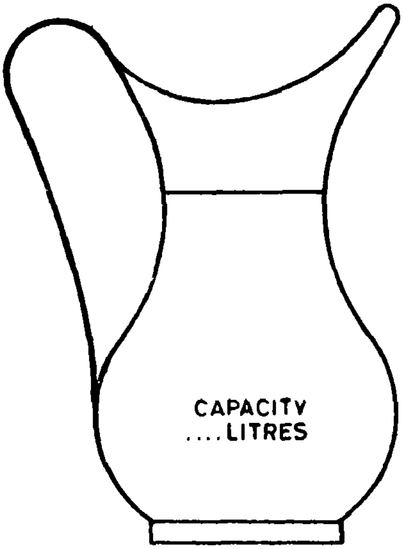


Fig. 8 Jug

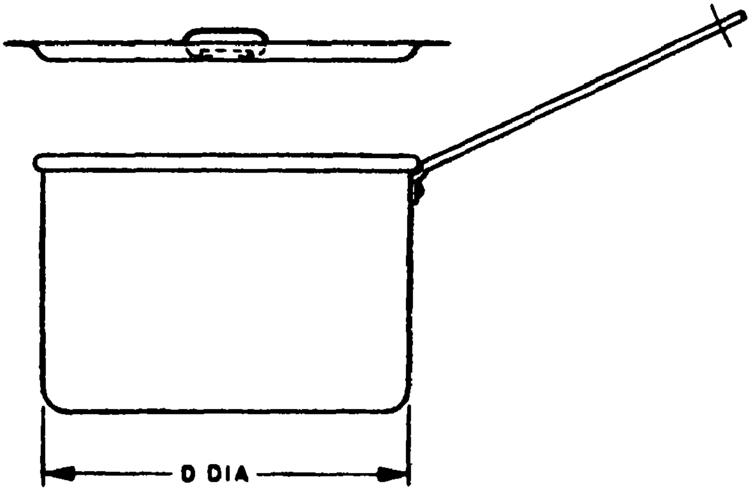


Fig. 9 Saucepan

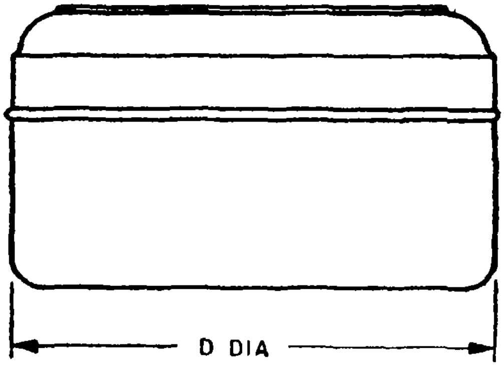


Fig. 10 *DABBA*

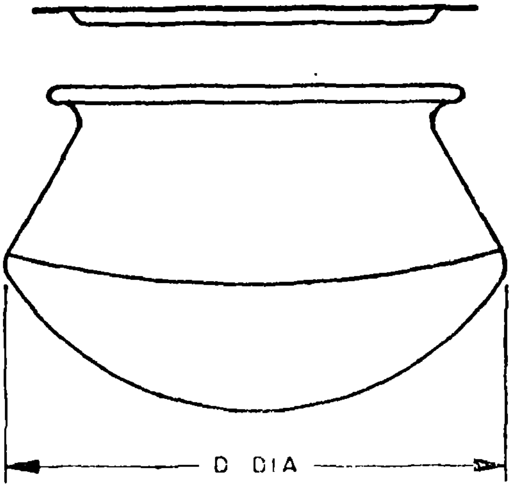


Fig. 11 *HANDI*

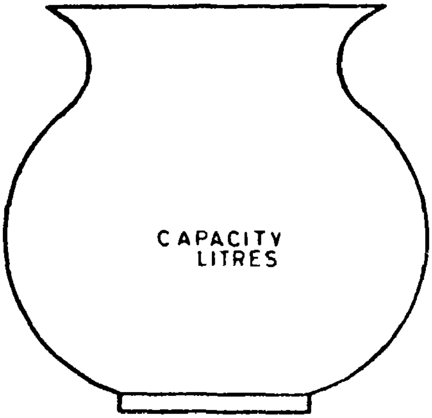


Fig. 12 *LOTAH*

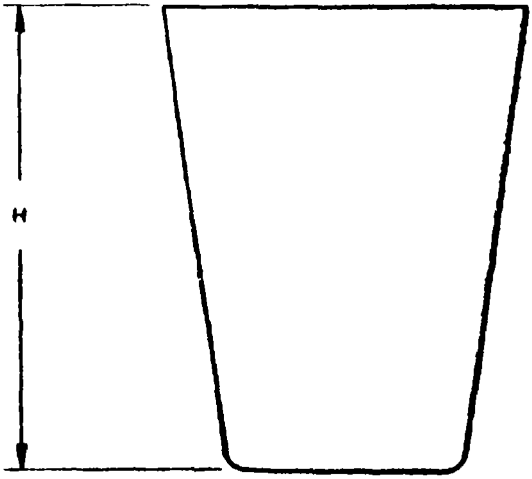


Fig. 13 Tumbler

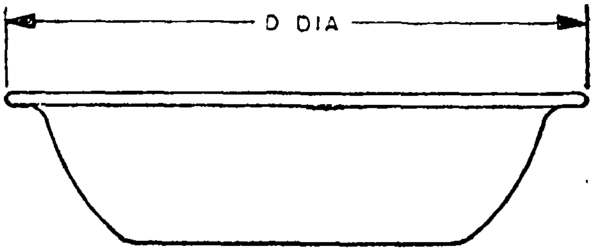


Fig. 14 Basin

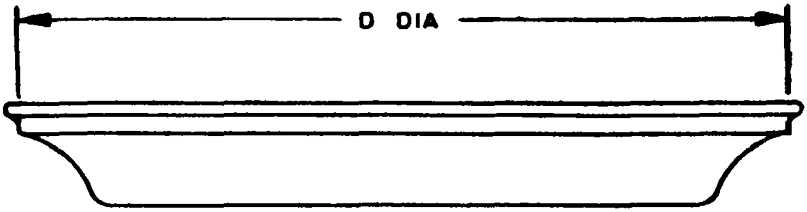


FIG. 15 BOMBAY PLATE

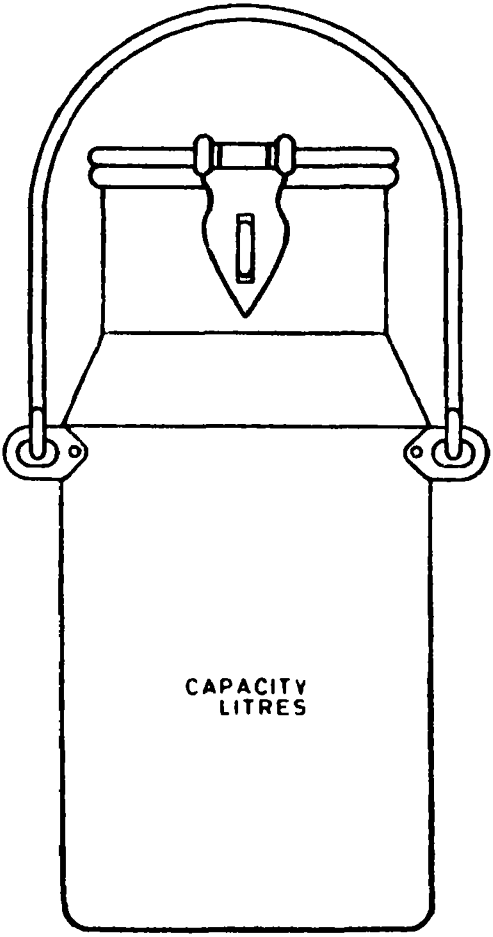


FIG. 16 MILK CAN

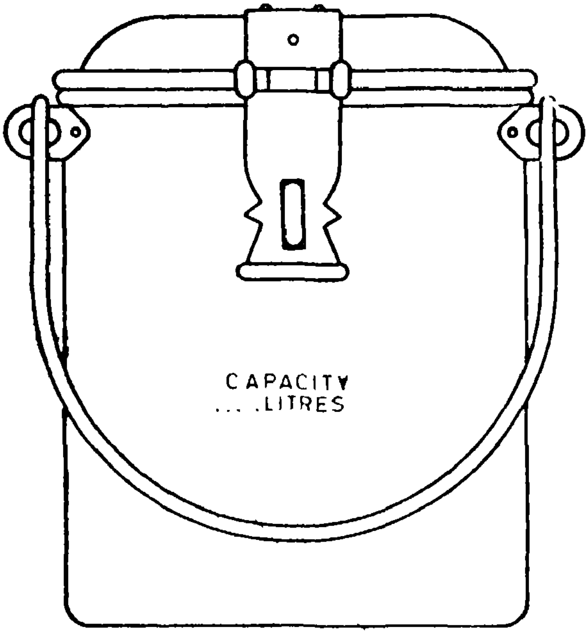


FIG. 17 MILK BUCKET

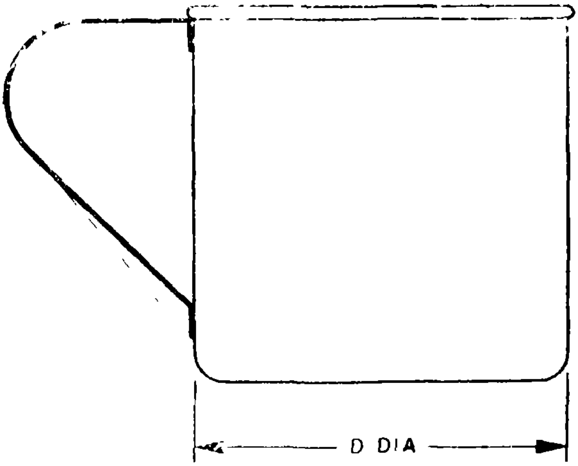


FIG. 18 MUG

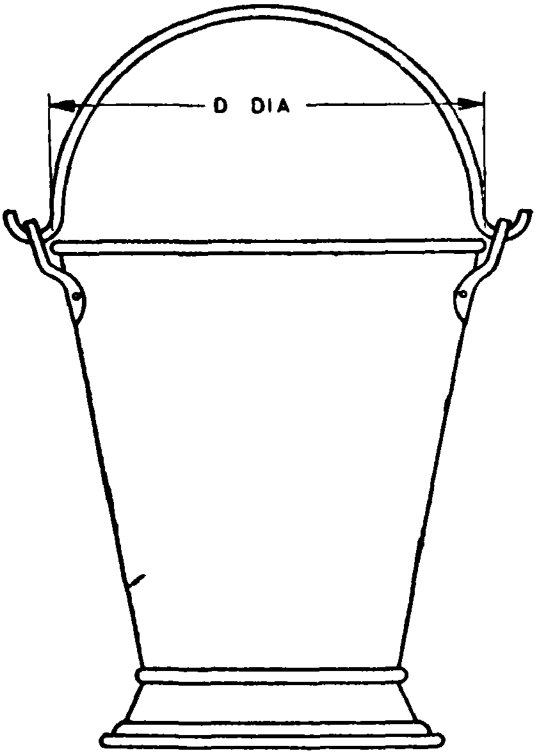


FIG. 19 BUCKET

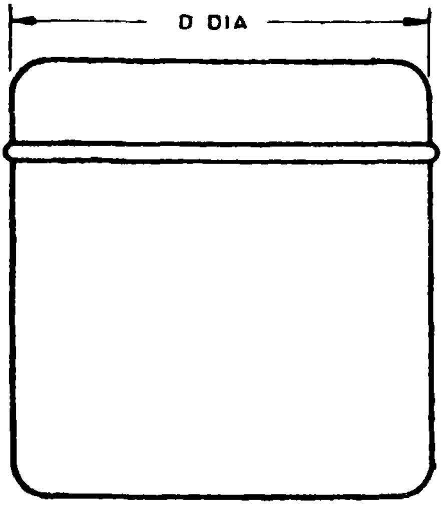


FIG. 20 *UBHA DABBA*

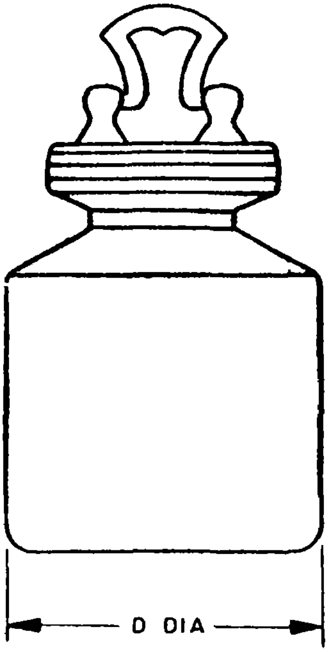
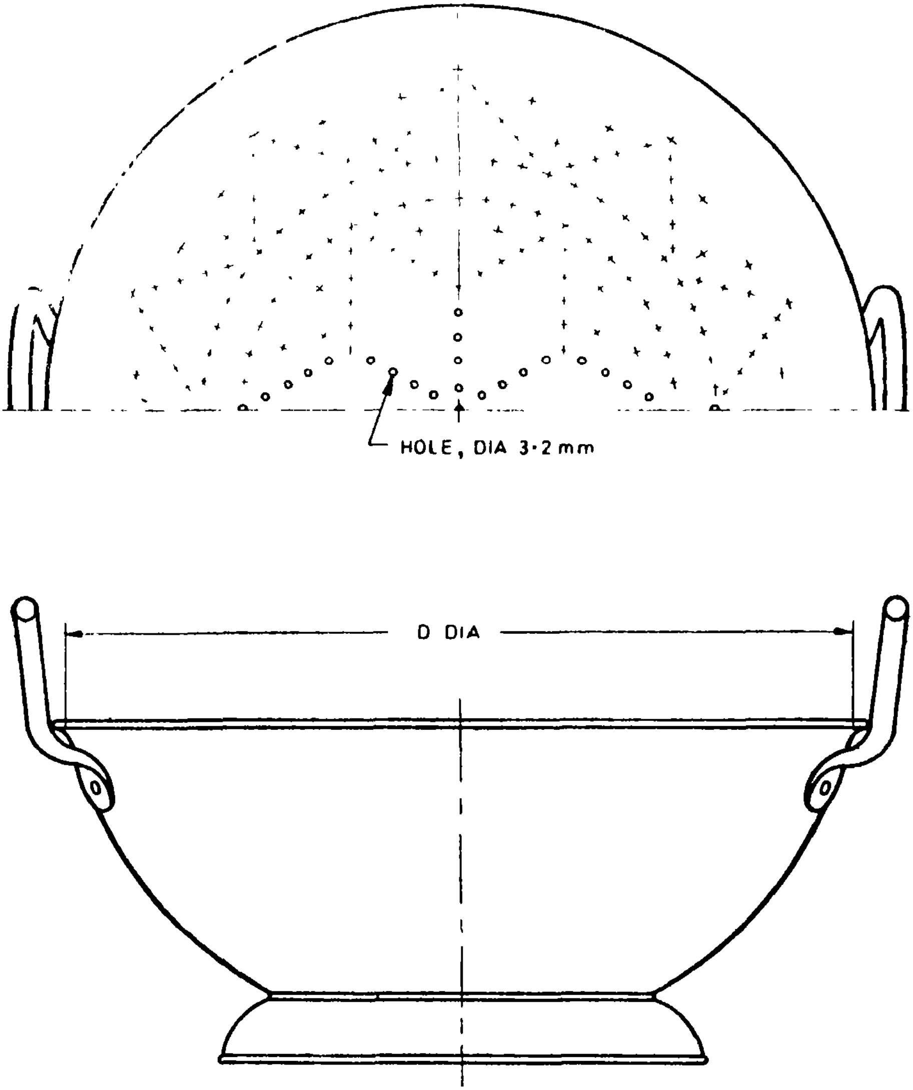


FIG. 21 SCREW *BARNI*



All dimensions in millimetres.

FIG. 22 COOKERY COLANDER

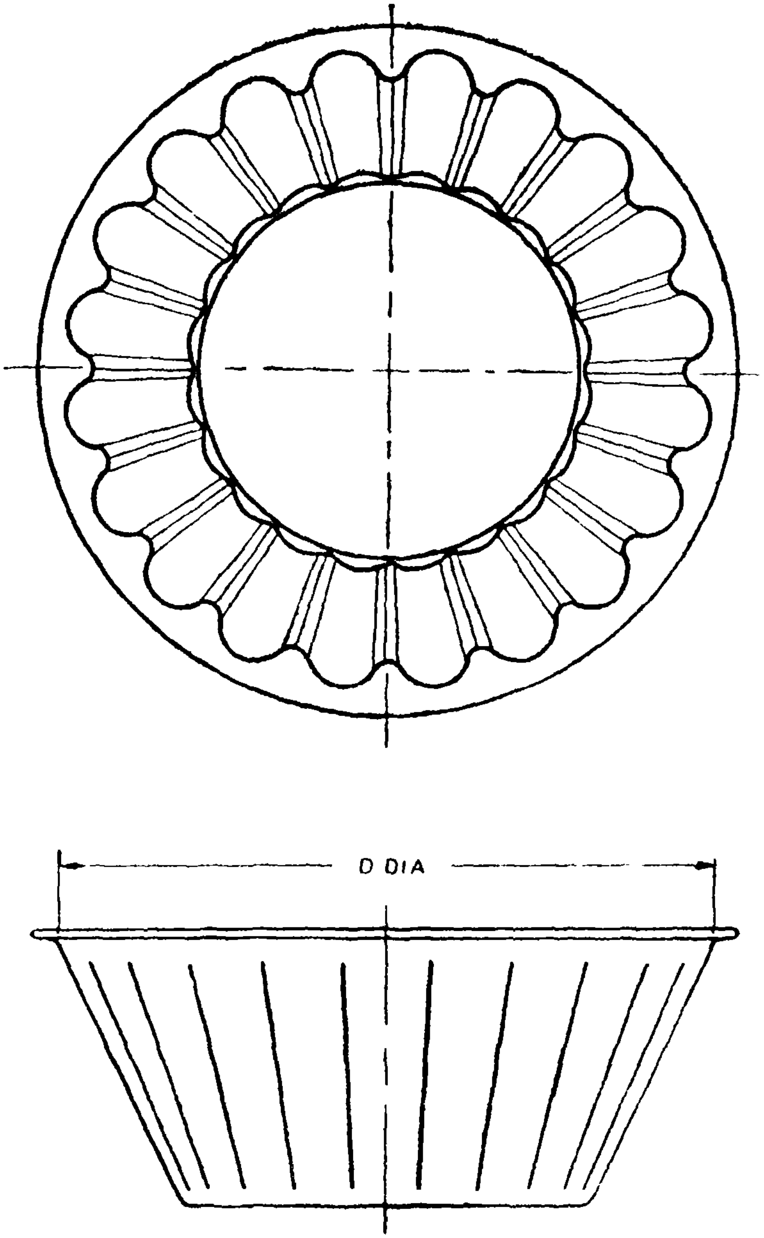


FIG. 23 PANS, PATTY (JELLY MOULD) FOR BAKING

TABLE 1 DIMENSIONS OF ALUMINIUM UTENSILS

(*Clauses* 2.1.1 *and* 5.1)

Sl No.	Article	Ref to Fig. No.	Range of Nominal Sizes			Nominal Thickness of Sheet					
			Dia D (Inside)	Height H (Inside)	Capacity (Litres)	Heavy		Medium		Light	
						Vessel	Lid	Vessel	Lid	Vessel	Lid
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
			mm	mm	l	mm	mm	mm	mm	mm	mm
1.	*KATORI*	1	75 to 150	—	—	—	—	1·22	—	0·90	—
2.	*THALI*	2	150 to 250	—	—	—	—	1·22	—	0·90	—
			255 to 325	—	—	—	—	1·60	—	1·22	—
3.	*PARAT*	3	150 to 250	—	—	—	—	1·22	—	0·90	—
			255 to 350	—	—	—	—	1·60	—	1·22	—
			355 to 625	—	—	—	—	2·00	—	1·60	—
			650 to 875	—	—	—	—	2·64	—		—
			900 to 1 250	—	—	—	—	3·25	—	—	—
4.	*DEGCHI with lid (cooking pot)	4	75 to 250	—	—	—	—	1·22	0·90	0·90	0·71
			255 to 325	—	—	3·25	1·60	1·60	1·22	1·22	0·90
			330 to 550	—	—	3·25	1·60	2·00	1·60	1·60	1·25
			560 to 750	—	—	3·25	1·60	2·64	1·60	2·00	1·60
			760 to 825	—	—	4·00	2·00	3·25	1·60	2·64	1·60
5.	Frying-pan	5	150 to 225	—	—	2·64	—	1·60	—	1·22	—
			230 to 300	—	—	3·25	—	2·00	—	1·60	—
6.	Kettle (body) with lid	6	—	—	0·5 to 1·5	—	—	1·22	0·90	0·90	0·71
			—	—	2·0 to 7·0	2·64	1·22	1·60	0·90	1·22	0·71
7.	Tiffin-carrier	7	100 to 180	—	—	—	—	1·22	—	0·90	—
8.	Jug	8	—	—	1·75 to 5·0	—	—	1·60	—	1·22	—
9.	Saucepan with lid	9	150 to 255	—	—	2·64	1·22	1·22	1·22	0·90	0·90

10. *DABBA* with lid	10	125 to 255	—	—	—	—	1·22	1·22	0·90	0·90
11. *HANDI* with lid	11	200 to 320	—	—	—	—	1·60	0·90	1·22	0·90
		325 to 560	—	—	—	—	2·00	1·22	1·60	1·22
12. *LOTAH*	12	—	—	0·75 to 1·5	—	—	1·22	—	0·90	—
13. Tumbler	13	—	90 to 130	—	—	—	1·25	—	0·90	—
14. Basin	14	85 to 310	—	—	—	—	1·25	—	0·90	—
		320 to 510	—	—	—	—	1·60	—	1·25	—
15. Bombay plate	15	150 to 250	—	—	—	—	1·25	—	0·90	—
		255 to 360	—	—	—	—	1·60	—	1·25	—
16. Milk can with bail handle and hinged lid	16	—	—	0·50 to 2·50	—	—	1·25	1·25	0·90	0·90
		—	—	3·00 to 6·00	—	—	1·60	1·60	1·25	1·25
17. Milk bucket with bail handle and hinged lid	17	—	—	3·00 to 5·00	—	—	1·25	1·25	0·90	0·90
		—	—	9·00 to 14·00	—	—	1·60	1·60	1·25	1·25
		—	—	15·00 to 20·00	—	—	2·00	2·00	1·60	1·60
18. Mug	18	75 to 155	—	—	—	—	1·25	—	0·90	—
19. Bucket and stand *BALTI*	19	230	—	—	—	—	0·90	—	—	—
		255	—	—	—	—	0·90	—	—	—
		305	—	—	—	—	1·25	—	—	—
20. *UBHA DABBA* with lid (canister wide mouthed)	20	115 to 210	—	—	—	—	0·90	0·71	—	—
		225 to 320	—	—	—	—	1·25	1·25	—	—
21. Screw *BARNI* with lid (container ghee, oil, etc)	21	125 to 150	—	—	—	—	0·90	0·90	—	—
22. Cookery colanders	22	205 to 460	—	—	—	—	1·25 (Body)	0·90 (Base)		
		510 to 610					1·60 (Body)	1·25 (Base)		
23. Pans, patty (jelly mould) for baking	23	65 to 150					0·90			

NOTE — The nominal thickness shall be the thickness at the place where little or no work has been done. For checking the reduction in thickness, measurements shall be made at the thinnest place, but excluding flanges or sharp corners.

*The lid of the same thickness may be supplied, if required by the purchaser.

3.2 The wires and rivets shall conform to Designation 19000 of IS : 739-1977* and the strips shall be manufactured from material conforming to Grade S_1C or NS_3 of IS : 737-1974†.

4. FABRICATION

4.1 The utensils shall be pressed or spun from one piece.

4.2 The permissible reduction in the thickness of the finished utensils, taking into account the drawing or spinning process and also the negative tolerance on the sheet shall not be more than 15 percent on the nominal sheet thickness.

5. SHAPE AND DIMENSIONS

5.1 The names of utensils of different popular shapes are given under Fig. 1 to 23. These figures also indicate the manner in which the size of the utensil is to be designated, namely, by diameter D, height H or capacity l, as appropriate. The range of nominal sizes and nominal thickness of sheets for three classes of utensils shall be as given in Table 1.

5.2 In case of utensils other than those covered by **5.1**, their shape, dimensions and class shall be as agreed to between the manufacturer and the purchaser.

6. HANDLES

6.1 Handles, when fitted, shall be of aluminium or of other suitable non-inflammable material. These shall be fastened to the utensils by tightly drawn aluminium rivets, by welding, by screwing to cast bosses or by riveting between flanges at the end of the handles. Handles shall be so shaped and positioned as to provide a comfortable grip.

6.2 Handles shall be sufficiently strong to support a mass in the utensils equivalent to three times the mass of the water capacity of the utensils in the position of normal use without visible permanent deformation of the handle or utensil.

7. WORKMANSHIP AND FINISH

7.1 The general workmanship and finish of utensils shall be of a high standard. The utensils shall be reasonably free from distortion, dents, wrinkles, wavy surfaces, burrs, scratches, pittings and deep tool marks.

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*Specification for wrought aluminium and aluminium alloy, wire for general engineering purposes (*second revision*).

†Specification for wrought aluminium and aluminium alloys, sheet and strip (for general engineering purposes) (*second revision*).

7.2 The design of the utensils shall be such that it is easy to clean and prevent accumulation of dirt.

7.3 The utensils, if anodized, shall satisfy the requirements of IS : 1868-1968*. Minimum thickness of anodic coating shall be of grade AC 5 or above as given in Table 1 of IS : 1868-1968*.

7.4 If required by the purchaser, the utensils may be supplied with coating conforming to IS : 9730-1981†.

8. INSTRUCTIONS FOR USE

8.1 The manufacturer shall provide an instruction sheet giving full instructions for use and cleaning, specially for those utensils which are anodized or coated.

9. MARKING

9.1 Each vessel shall be legibly and indelibly stamped on the outside surface or handle with the manufacturer's name or registered trade-mark and the appropriate class (*see* **2.1**).

9.1.1 The product may also be marked with Standard Mark

9.1.2 The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder The details of conditions under which the licence for the use of Standard Mark may be granted to manufactures or producers may be obtained from the Bureau of Indian Standards

10. PACKING

10.1 The utensils shall be packed in accordance with the best trade practice or as agreed to between the purchaser and the supplier.

11. SAMPLING AND CRITERIA FOR CONFORMITY

11.1 It shall be done in accordance with IS : 9040-1978‡.

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*Specification for anodic coatings on aluminium (*first revision*)

†Specification for non-stick unreinforced plastics coatings on domestic cooking utensils.

‡Methods for sampling of utensils.

(*Continued from page* 2)

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